

**REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

**I. Claim Status and Amendments**

Claims 1-18 are pending in this application and stand rejected.

Claim 1 is amended to incorporate claim 2, which has been cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional application on any cancelled subject matter.

Applicants have made minor editorial revisions to claims 1, 3-9, 10, 11, 12, and 18 to better conform to U.S. claim form and practice. Such revisions are non-substantive and not intended to narrow the scope of protection. For instance, claims 3-9 are revised to recite "The focusing channel device according to. . ." to better conform to US practice for antecedent basis. Claims 10, 11, and 12 are also revised to better conform to US practice for antecedent basis. Claims 9 and 18 are revised to recite "a bead, a cell or a bacterium" to use proper grammar. In keeping with US law, the use of "a" or "an" carries the meaning of "one or more".

Claims 1 and 3-18 are pending upon entry of this amendment, and these claims define patentable subject matter warranting their allowance for the reasons discussed herein.

Applicants note that the amended claims do not present any new issues for consideration and/or search as they incorporate subject matter already considered by the Office. Accordingly, if the next Office Action on the merits includes a new ground of rejection of one or more claims, the Action must be non-final.

## **II. Obviousness Rejections**

Claims 1, 4-10, and 13-18 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Daridon (US Patent Application Publication 2004/0229349) in view of Goel et al. (Blood, 100(10): 3797-3803 (2002) and Usami et al. (Ann. Biomed. Engineering, 21:77-83 (1993)) for the reasons in item 3 on pages 2-6 of the Office Action.

Claims 2-3 and 11-12 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Daridon in view of Goel et al. and Usami et al. and further in view of Kawano et al. (US 6,994,218) for the reasons in item 4 on pages 6-7.

These rejections are respectfully traversed.

As to the first obviousness rejection over Daridon in view of Goel et al. and Usami et al., the present amendment

removes the rejection by amending claim 1 to incorporate the subject matter of claim 2, which was not included in the rejection. This amendment is being made for the sole purpose of expediting prosecution and not to acquiesce to the rejection.

As to the second obviousness rejection over Daridon in view of Goel et al., Usami et al. and Kawano et al., Applicants respectfully submit that the rejection falls, because the cited prior art references fail to teach, suggest or make obvious all of the limitations of the claims, as required to support a *prima facie* case of obviousness.

Claim 1, as amended, calls for a focusing channel device comprising a nozzle formed by a left wall and a right wall each of which comprises an inclination surface, wherein a cross sectional area of the nozzle in vertical direction decreases from the entrance of the nozzle toward the exit of the nozzle, and a cross sectional view of the channel in horizontal direction has a shape that is asymmetric for the central line in the length direction, wherein the inclination surface of one of the left or right wall which forms the nozzle is closer to the entrance of the channel device than the inclination surface of the other wall by a distance L, wherein the distance L is set by a factor of a diameter of the micro particle.

It is believed that the combined cited references fail to teach, suggest or make obvious the feature of "the inclination surface of one of the left wall or the right wall, which forms the nozzle, is closer to the entrance of the channel device than the inclination surface of the other wall" as required in claim 1, as amended.

The primary reference of Daridon fails to disclose or suggest this feature. Instead, Daridon discloses an acceleration region (1042; Figs 31 and 32), which narrows the width of the channel to increase the flow velocity and further focus particles into a single stream. Indeed, in the last paragraph on page 6 of the Office Action, the Examiner acknowledges that Daridon in combination with Goel et al. and Usami et al. "do not teach differences in the left and right inclination walls with respect to the entrance of the channel."

The Examiner relies on Kawano et al. for allegedly disclosing the above-noted missing elements. Specifically, the Examiner points to the disclosure at column 9, lines 3-8, and element 19c in Figure 4a of Kawano et al. and argues that the claimed elements are within the teachings of Kawano et al., because "[i]t would have been obvious to one of ordinary skill in the art to modify the modified device of Daridon to include the inclined surfaces of Kawano in order to guide

cells into the channel." See the paragraph bridging pages 6-7 of the Office Action.

Applicants respectfully disagree and submit that Kawano et al. fails to disclose or suggest that for which it is offered. Kawano et al. only discloses inclination surfaces. Kawano et al. does not disclose two inclination surfaces on opposing walls, wherein one inclination surface is closer to the entrance of the channel device than the inclination surface of the other wall by a distance L. Thus, at most, the addition of Kawano et al. to Daridon, Goel et al., and Usami et al. would suggest an asymmetric channel, but it would not suggest one with a skewed property in which the inclination surface of one of the left wall or the right wall is closer to the entrance of the channel device than the inclination surface of the other wall by a distance L as required in claim 1.

Further, the distance L is set by a factor of a diameter of the micro particle (see dependent claims 3 and 17). The combined references are silent as to this feature of the dependent claim.

In view of the above, it is clear that even if the references were combined, their combined teachings would not arrive at the focusing channel device of claim 1. Further, neither the references nor the rejection provide a rationale

for modifying the prior art teachings to arrive at the claimed device.

For these reasons, the combined teachings of Daridon, Goel et al., Usami et al. and Kawano et al. cannot render obvious the device of independent claim 1. Thus, independent claim 1 and all claims dependent thereon (i.e., claims 3-18) are novel and non-obvious over the combined cited prior art references. Withdrawal of the above 103(a) obviousness rejections is therefore solicited.

### **III. Conclusion**

Having addressed all the outstanding issues, the amendment is believed to be fully responsive to the Office Action. It is respectfully submitted that the claims are in condition for allowance and favorable action thereon is requested.

Appln. No. 10/583,724  
Amdt. dated June 19, 2009  
In reply to the Office Action of March 20, 2009

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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